

2019 IEEE International Conference on Industrial Cyber-Physical Systems (ICPS2019)  
2019 IEEE International Conference on Multisensor Fusion and Integration for  
Intelligent Systems (MFI2019)

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## Special Session on “Intelligentized Robotic Welding and Intelligent Welding Manufacturing”

### organized by

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## Call for Papers

**Theme:** With the development of advanced manufacturing technology, robotic intelligentized welding, and intelligentized welding manufacturing have been key technologies in the manufacturing industry and present the development trends. Actually, nowadays, nearly half of the industry robots in service are welding robots. Teaching play-back robots in service, however, cannot meet the standards of quality, precision and efficiency of the high tech welding products due to the assembling error, the changes on welding environment and condition, the complexity of welding dynamics, the welding deformation and so on. Therefore, it is quite urgent to conduct the research works on the intelligentized robotic welding technology and then develop the new generation of the Intelligentized welding robots and systems which can preliminarily imitate the human welders' behavior.

### **This special section will focus on (but not limited to) the following topics:**

- Robotic and Intelligentized welding manufacturing
- New type special welding robot technologies
- Planning and simulation of robotic welding
- Autonomous guiding and tracking of welding robots
- Quality control of robotic welding
- Welding technologies on tele robots and network robots
- Sensing technologies for welding process
- Knowledge extraction and intelligent control of welding process
- Robotic welding under special environment
- Applications of welding robots
- Intelligentized, digitalized and flexible welding equipments
- Intelligentized flexible welding manufacturing systems
- Special intelligentized robot technologies and its systems
- Intelligentized technologies for industrial robot
- Intelligentized technologies for industrial process
- Other related topics on intelligentized manufacturing

# IEEE Transactions on Industrial Informatics



**Submissions Procedure:** All the instructions for paper submission are included in the conference website <http://icps19.org/final-paper-submission>

**Deadlines:**

Reception of full paper:	January 31, 2019
Paper acceptance notification:	March 1, 2019